

**IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA**

e-LYNXX CORPORATION,	:	CIVIL ACTION NO. 1:10-CV-2535
	:	
Plaintiff,	:	
	:	(Judge Conner)
v.	:	
	:	
INNERWORKINGS, INC.,	:	
RENT-A-CENTER, INC.,	:	
DR. PEPPER SNAPPLE GROUP,	:	
INC., R.R. DONNELLEY & SONS	:	
CO., NEWLINENOOSH, INC.,	:	
THE STANDARD REGISTER CO.,	:	
AND CIRQIT.COM, INC.,	:	
	:	
Defendants	:	

MEMORANDUM

Presently before the court in this patent infringement action is the motion for summary judgment (Doc. 109) of defendants Innerworkings, Inc., Taylor Corporation, Rent-a-Center, Inc., Dr. Pepper Snapple Group, Inc., Staples, Inc., R.R. Donnelley & Sons Company, NewlineNoosh, Inc., The Standard Register Company, and Cirqit.com, Inc. (collectively, “defendants”). Also before the court are the parties’ contentions regarding the proper interpretation of claim terms. (Docs. 112, 113, 125, 126). The court will first construe the disputed terms and limitations pursuant to Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996). Having construed the terms, the court will then consider defendants’ motion for summary judgment.

I. Factual Background and Procedural History**A. Factual Background**

At issue in the instant matter are U.S. Patent No. 7,451,106 (the “‘106 patent”) and U.S. Patent No. 7,788,143 (the “‘143 patent”). These patents cover procurement systems used for competitive bidding on customized goods and services. See ‘106 patent, abstract; ‘143 patent, abstract. The ‘143 patent is a continuation of the ‘106 patent and shares its specification with the ‘106 patent. William A. Gindlesperger invented the system covered by both patents, which was assigned to plaintiff e-LYNXX Corporation (“e-LYNXX”).

Abstracts of the ‘106 patent and the ‘143 patent describe the invention as “[a]n apparatus and method for selecting a lowest bidding vendor from a plurality of vendors of a customized good or service.” ‘106 patent, abstract; ‘143 patent, abstract. As the name suggests, custom-produced goods and services, unlike pre-stocked or “off-the-shelf” goods, are manufactured to the specific requirements of the buyer. ‘106 patent, col. 1, ll. 30-45. Pricing, availability, and buyer specifications are likely to vary from project to project, leading to the so-called “iron triangle” of cost, timeliness, and quality. Id. col. 2, ll. 12-21. The “iron triangle” problem derives from the conundrum that buyers desire: (1) high quality goods; (2) quickly; and (3) at an inexpensive price, but can generally achieve only two of these desires – for example, high quality goods on short notice, but at great cost, or inexpensive goods quickly, but lacking in quality. It is this problem that the invention at issue seeks to solve.

The method claimed by e-LYNXX is designed to streamline the procurement process for custom goods. As described in the specification, the prior art in this area entailed high search costs for buyers. Buyers were generally limited to soliciting bids from a small number of vendors, and then simply awarding the contract to the lowest bidder, or awarding it to a vendor who did not submit the lowest bid but with whom the buyer had a previous relationship and could trust to produce high quality work. Buyers could also solicit bids and then “shop” the lowest bid to other vendors seeking a better deal. See id. col. 2, ll. 4-11.

Problems persisted on the supply side of the transaction as well. Manufacturers in industries with substantial overhead and labor costs – for example, printing and information product suppliers, see id. col. 2, ll. 35-50 – must balance their need to maintain a steady production schedule with the need to be available on short-notice to handle rush orders from regular customers. Manufacturers do not want to allow machinery and labor to sit idle for too long, thereby cutting into their profit margins. Id. Hence, manufacturers build into their production schedules a certain amount of slack time in the event that a customer places an unexpected rush order. Id. But if an expected order is withdrawn or cancelled, a manufacturer may be left with both an unscheduled lapse in its regular production schedule, and planned downtime that it has yet to fill with a rush order. Id. col. 2, ll. 43-50. Vendors seek to fill these unexpected holes in their production schedule with short-turnaround orders, securing these by low prices to undercut

any competitive bids. Id. col. 2, ll. 50-56. This process is referred to as “contribution pricing.”¹

On the demand side, the substantial administrative cost of a search for suitable vendors leads inexorably to a small number of primary vendors who receive bid solicitations, which in turn leads to higher prices due to reduced competition. Id. col. 3, ll. 7-27. Maintaining a large database of qualified vendors in order to take advantage of competitive pricing is oftentimes impractical for buyers. Id. col. 3, ll. 42-46 (“In the actual business environment . . . identifying such a large vendor pool is generally not practical . . . [G]athering and maintaining information about a large number of current and potential vendors is time consuming and expensive.”). The claimed invention combines the benefits of vendors’ contribution pricing with a method for aggregating vendor qualifications and attributes to allow buyers to solicit bids from a greater number of vendors, thereby capturing the benefit of increased competition.

The claimed system involves an eight-step process: (1) the vendors enter records regarding their plurality of capabilities; (2) the buyers identify a potential pool of vendors for the job solicitation; (3) the buyer enters job data with a plurality of characteristics; (4) the system automatically compares the vendor’s

¹ This low cost pricing strategy is referred to as contribution pricing because the price is typically below the vendor’s normal profit margin level, but it exceeds production expenses incurred in filling the order. In this fashion, it “contributes” to the vendor’s bottom line more so than idle machinery and idle labor. Id. col. 2, ll. 51-65.

plurality of capabilities to the plurality of characteristics of the job; (5) the system identifies the subset of the vendor pool which are qualified for the job; (6) the system solicits bids to the subset of the vendor pool who are qualified for the job; (7) the system receives bid response data from the subset of the vendor pool who are qualified for the job; (8) the bid response data is transmitted to the buyer. ‘143 patent, col. 18, l. 50 – col. 19, l. 32 (Claim 1); ‘106 patent, col. 20 l. 64 – col. 21, l. 49 (Claim 13).

B. Procedural History

On December 14, 2010, e-LYNXX filed this patent infringement action against defendants.² (See Doc. 1). e-LYNXX alleges infringement of claims 13, 14, 15, 16, and 18 of the ‘106 patent and claims 1 and 2 of the ‘143 patent against each defendant. (Doc. 110 ¶ 1, Doc. 129 ¶ 1). Claims 14, 15, 16, 17, and 18 of the ‘106 patent are dependent claims referring back to independent claim 13; claims 1 and 2 of the ‘143 patent are independent.³ The parties filed claim construction briefs (Docs. 111, 112) on August 12, 2011. e-LYNXX and defendants dispute twelve claim

² In addition to the remaining defendants, e-LYNXX also originally sued Emptoris, Inc. and Quadrem U.S., Inc. Subsequently, e-LYNXX stipulated to dismiss the action against Emptoris and Quadrem. (See Docs. 161, 162).

³ “An independent claim is completely self-contained. A dependent claim refers back to an earlier claim and is considered to include all of its own limitations as well as those of the referenced claim.” HERBERT F. SCHWARTZ AND ROBERT J. GOLDMAN, PATENT LAW AND PRACTICE § 2.III.B.1 (7th ed. 2011). If an independent claim is deemed invalid, all claims that depend on it must fall as well. See Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1347 (Fed. Cir. 2005).

terms and eight means plus-function limitations.⁴ (See Doc. 102-1). On August 12, 2011, defendants jointly moved for summary judgment against e-LYNXX, asserting that all asserted claims are invalid for failure to meet the patentability requirements of 35 U.S.C. § 112, ¶ 1 (written description requirement) and ¶ 2 (indefiniteness). (See Doc. 109). On October 11, 2011, the court conducted a Markman hearing and heard oral argument on the pending motion for summary judgment. (Doc. 160). The parties have fully briefed the issues, and the matter is now ripe for disposition.

II. Standard of Review

A. Motion for Summary Judgment

Through summary adjudication the court may dispose of those claims that do not present a “genuine issue as to any material fact” and for which a jury trial would be an empty and unnecessary formality. See FED. R. CIV. P. 56(a). The burden of proof is upon the non-moving party to come forth with “affirmative evidence, beyond the allegations of the pleadings,” in support of its right to relief. Pappas v. City of Lebanon, 331 F. Supp. 2d 311, 315 (M.D. Pa. 2004); see also Celotex Corp. v. Catrett, 477 U.S. 317, 322-23 (1986). This evidence must be adequate, as a matter of law, to sustain a judgment in favor of the non-moving party on the claims. See Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 250-57 (1986); Matsushita Elec.

⁴ The parties no longer dispute “a selection criteria data” and “selection criteria.”

Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587-89 (1986); see also FED. R. CIV. P. 56(a). Only if this threshold is met may the cause of action proceed. Pappas, 331 F. Supp. 2d at 315.

B. Claim Construction

An inventor may assert ownership only over those designs encompassed within the claims section of the patent. See 35 U.S.C. § 112; Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 63 (1998); Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005), cert. denied, 546 U.S. 1170 (2006). The proper construction of claims is a question of law, Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996), of which the central purpose is to aid the jury. O2 Micro Intern. Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1360-63 (Fed. Cir. 2008).

Claim construction requires the court to determine the “ordinary and customary meaning” of the claim terms as they would be understood by “a person of ordinary skill in the art in question at the time of the invention.” Phillips, 415 F.3d at 1312-13; see also Arlington Indus., Inc. v. Bridgeport Fittings, Inc., 290 F. Supp. 2d 508, 519 (M.D. Pa. 2003). Intrinsic evidence – i.e., the language of the patent and its prosecution history – are the “primary resources” reviewing courts use to construe claims. Kara Tech. v. Stamps.com, Inc., 582 F.3d 1341, 1348 (Fed. Cir. 2009). The court may use extrinsic evidence, such as dictionaries, treatises, and expert testimony, to aid in claim construction, but such evidence is “less significant than the intrinsic record” and is “unlikely to result in a reliable interpretation of

patent claim scope unless considered in the context of the intrinsic evidence.”

Phillips, 415 F.3d at 1317-19, 1324; see also Home Diagnostics, Inc. v. LifeScan, Inc., 381 F.3d 1352, 1355-56 (2004).

In using the language of the patent itself, “claims ‘must be read in view of the specification,’ . . . [which] is the single best guide to the meaning of a disputed term.” Phillips, 415 F.3d at 1315 (citing Markman, 52 F.3d at 979; and Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996)). Likewise, “the claims themselves provide substantial guidance as to the meaning of particular claim terms.” Id. at 1314 (citing Vitronics, 90 F.3d at 1582). To this end, the context in which a claim term is used, the language of other claims in the patent, and the differences among claims can assist the court in construing disputed claim terms. See id. at 1314-15.

III. Discussion

The court will first construe the disputed claim terms. Then, having done so, the court will consider defendants’ motion for summary judgment. Because construction of the disputed means-plus-function limitations is inextricably intertwined with the validity analysis of those limitations, the court will construe them in the context of the parties’ summary judgment arguments.

A. Claim Construction

1. Disputed Claim Terms

The parties dispute the meaning of twelve claim terms. The court will address them *seriatim*.

i. “*buyer*”

The parties dispute the meaning of the claim term “buyer,” which appears at various locations in claim 13 of the ‘106 patent and claims 1 and 2 of the ‘143 patent. e-LYNXX contends that “buyer” requires no construction, but to the extent that the court decides to construe it, the term should mean “one who makes a purchase.” (Doc. 113 at 7). Defendants counter that the term “buyer” refers specifically to the “ultimate purchaser of customized goods or services,” excluding from the definition any intermediary who procures or buys goods *on behalf* of the ultimate purchaser. (Doc. 112 at 6).

A claim term must be read in the context of the particular claim of which it is a part, and in the context of the patent as a whole. See Phillips, 415 F.3d at 1313. The manner in which a term is referenced in the claim itself may provide “substantial guidance” as to the term’s definition. Id. (citing Vitronics, 90 F.3d at 1582). Indeed, “the context of the surrounding words of the claim must be considered in determining the ordinary and customary meaning of those terms.” ACTV, Inc. v. Walt Disney Co., 346 F.3d 1082, 1088 (Fed. Cir. 2003).

With these principles in mind, the court adopts defendants’ proposed claim construction. The term “buyer” as used in the claims is often preceded by language distinguishing an intermediary from the ultimate purchaser. See, e.g., ‘106 patent, col. 21, ll. 21-22 (“job for which bids are sought *by or on behalf of the buyer*”) (emphasis added); id. at col. 21, ll. 23-24 (“a means for receiving an electronic communication defining a job data *from or on behalf of* at least one buyer”)

(emphasis added); ‘143 patent, col. 19, ll. 1-2 (“receiving an electronic communication *from or on behalf of any buyer*”) (emphasis added); *id.* at col. 19, ll. 11-12 (“analysis of job data pertaining to a job for which bids are sought *by or on behalf of the buyer*”) (emphasis added); *id.* col. 20, ll. 9-10 (“receive an electronic communication *from or on behalf of any buyer*”) (emphasis added). This distinguishing language strongly implies that the definition of “buyer” is narrower than simply “one who makes a purchase,” otherwise there would be no need to differentiate between a buyer and an intermediary. *Cf. Phillips*, 415 F.3d at 1314 (“steel baffles” implies that baffles are not “inherently” steel). Moreover, to adopt e-LYNXX’s proposed construction would swallow any distinction between a “buyer” and one who purchases “from or on behalf of” a buyer, because both entities would be “one who makes a purchase.” This would violate the Federal Circuit’s instruction that differences in claim language are presumed to reflect a difference in scope. *See Forest Labs., Inc. v. Abbott Labs.*, 239 F.3d 1305, 1310 (Fed. Cir. 2001); *see also Elekta Instrument S.A. v. O.U.R. Scientific Intern., Inc.*, 214 F.3d 1302, 1307 (Fed. Cir. 2000) (claim construction that rendered a portion of the claim language superfluous reversed).

This construction is buttressed by the manner in which “buyer” is used in the specification. While it is improper for a court to read a limitation into a claim from the specification, claims “must be read in view of the specification, of which they are a part.” *Phillips*, 415 F.3d at 1315; *see also id.* (“[T]he specification is always highly relevant to the claim construction analysis. Usually, it is dispositive. .

. . .) (internal citation and quotations omitted); Merck & Co. v. Teva Pharms. USA, Inc., 347 F.3d 1367, 1371 (Fed. Cir. 2003) (“[C]laims must be construed so as to be consistent with the specification”) The use of “buyer” in the specification therefore sheds light on its meaning as used in the claims. The specification generally describes job data input into the system in the context of the buyer’s preferences. See ‘106 patent, col. 1, ll. 35-36 (goods are manufactured “to meet the buyer’s particular requirements”); id. at col. 16, ll. 26-27 (the invention “quantif[ies] . . . the buyer’s procurement needs”); id. at col. 5, ll. 57-59 (describing the “buyer’s requested manufactured item or customized service”); id. at col. 10, ll. 19-22 (a winning vendor produces “the buyer-required manufactured item or customized service”). The “particular requirements” of job solicitations originate not from third-parties who enter them on behalf of buyers, but from the buyers themselves. Put another way, it is not the intermediary who determines the specifications of a job solicitation, but the buyer on whose behalf the intermediary acts. Defendants’ proposed construction of “buyer” therefore finds support in both the specification and the claims.

ii. “electronic communications”

e-LYNXX contends that “electronic communications” – like “buyer” – requires no construction, or alternatively that the term means “information transmitted or conveyed electronically.” (Doc. 113 at 8). Defendants urge the court to adopt a narrower construction, limiting the definition to “electronic data input/output directly to/from the system.” (Doc. 112 at 9). They assert that the

claims identify four specific types of “electronic communications,” each of which references a specific actor in the system who must input data directly into, or receive data output directly from, the system. (Id. at 9-10). These four types include “electronic communications from a plurality of vendors,” ‘106 patent, col. 21, ll. 1-2; electronic communications “from any buyer using the system,” id. col. 21, ll. 12-13; electronic communications “defining a job data from or on behalf of at least one buyer,” id. col. 21, ll. 23-24; and electronic communications “providing at least one . . . bid response” to a buyer, id. col. 21, ll. 48-49. They posit that the “named actor” must directly input or receive output directly from the system, through an internet browser.

Defendants’ construction is unsupported by the specification and, moreover, would be inconsistent with their asserted definition of the term “buyer.” To reiterate, the court has adopted defendants’ proposed construction of “buyer” – that the term refers distinctly to the *ultimate* purchaser, excluding any intermediary. In light of the court’s construction, one must consider the context in which “electronic communication” is used: claim 13 of the ‘106 patent describes, in part, “an electronic communication defining a job data from or on behalf of at least one buyer.” Col. 21, ll. 23-24. If “electronic communication” inherently required input by the “named actor” – in this instance, the buyer – then it would construe out of the claims the option of the electronic communication originating from one “on behalf” of the buyer. As the Federal Circuit has instructed, “all claim terms are presumed to have meaning in a claim.” Innova/Pure Water, Inc. v. Safari Water

Filtration Systems, Inc., 381 F.3d 1111, 1119 (Fed. Cir. 2004). Defendants' construction would drain any meaning from the phrase "from or on behalf." Furthermore, claim terms are normally used consistently throughout a patent. See Phillips, 415 F.3d at 1314-15 ("the usage of a term in one claim can often illuminate the meaning of the same term in other claims"). Defendants' narrow construction of "electronic communication" would be inconsistent with its use relative to the term "buyer," and that finding must influence how the term is used in other portions of the patent.

e-LYNXX's interpretation of "electronic communication" to mean simply "information transmitted or conveyed electronically" is entirely consistent with the specification. Contrary to defendants' contention, the specification expressly provides for communication of information through computers via means *other* than web browsers. See '106 patent, col. 15, l. 67 – col. 16, l. 4 (computers may receive "vendor bid information or other data via facsimile, voice, or electronic mail" and may be "linked directly with the database servers in order to transfer this information to the database servers automatically"). And finally, the specification discloses that print vendors may transmit their vendor attributes to the system "by e-mail or equivalent means" and that this may be communicated by the vendor themselves or "any authorized third party," id. at col. 11, ll. 31-34, further undermining defendants' argument that only the "named actors" themselves may

initiate or receive the communication. The court therefore adopts e-LYNXX's proposed construction of "electronic communications" to refer to "information transmitted or conveyed electronically."

iii. "vendor records"

e-LYNXX asserts that "vendor records" refers simply to "a set of attributes associated with a vendor." (Doc. 113 at 9). These attributes include the production capabilities of the vendor, but also such information as geographic location. (*Id.*) Defendants argue that "vendor records" means "data input into the system by the vendor which identifies the vendor's capabilities," (Doc. 112 at 12), a narrower construction in that it limits both *who* may enter the records (the vendor), and *what* data constitutes the records ("vendor capability data," rather than the broader "attributes").

Defendants correctly assert that "vendor capability data" must be included within the vendor records, see '106 patent, col. 22, ll. 42-46 ("[T]he vendor records corresponding to each of a plurality of vendors *and having* vendor capability data . . .) (emphasis added), but it does not follow that the vendor records must consist *exclusively* of vendor capability data. The specification explicitly reflects that the database stores information about a vendor above and beyond its capabilities. See '106 patent, col. 7, ll. 60-67 ("entry by the vendors 8 of a set of vendor's attributes VATTR, each VATTR representing the name, geographical location and the manufacturing, production, and/or provider capabilities *and other attributes* of the . . . vendor[] submitting it"). Indeed, the specification describes "other attributes,"

such as whether the vendor uses union labor, is a small or disadvantaged business, or is minority- or women-owned. Id. col. 8, ll. 50-54.

Similarly, the court concurs with e-LYNXX's assertion that the vendor records need not be input by the vendors themselves, but may be input by an intermediary or third-party. First, the specification itself describes an alternative embodiment that contemplates just such a possibility. '106 patent, col. 11 ll. 31-34 ("Alternatively, the print vendors 8 can transmit their respective vendor attributes VATTR to the print buyer 6 by e-mail or equivalent means for entry by the print buyers 6 or *any authorized third party*.") (emphasis added). Second, defendants' argument that this embodiment was disavowed in prosecution is unpersuasive. The claim amendment that defendants cite for the alleged disavowal references only "receiving electronic communications from a plurality of vendors, the electronic communications being used in establishing a plurality of vendor records which are stored in an electronic memory associated with a computer system." (See Doc. 112 at 12); (Doc. 113-10 at App'x 760). This language does not support defendants' claim that e-LYNXX disavowed any embodiment which contemplates vendor record entry by a party other than the vendor. See Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 906 (Fed. Cir. 2004) ("[T]he claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using 'words or expressions of manifest exclusion or restriction.'" (quoting Teleflex, Inc. v. Ficosa North America Corp., 299 F.3d 1313, 1327 (Fed. Cir. 2002))). The claim amendment contains no such express disavowal of an

embodiment allowing vendor record entry by a third party, and therefore defendants' argument is rejected, and e-LYNXX's interpretation of "vendor records" is adopted.

iv. "vendor capability data" and "plurality of capabilities for said vendor to provide a customized good or service"

The parties' constructions for "vendor capability data" and "plurality of capabilities for said vendor to provide a customized good or service" are quite similar, with the noted exception that defendants would exclude from the definition the vendor's name, contact information, payment preferences, type of business, and goods sold. (See Doc. 112 at 15). e-LYNXX proposes that these terms need no construction, or alternatively that "vendor capability data" means "a set of information identifying a plurality of capabilities for a vendor to provide a customized good or service," and that "plurality of capabilities for said vendor to provide a customized good or service" means "two or more capabilities of a vendor to provide a customized good or service." (Doc. 113 at 10). Defendants would construe the two terms as synonyms, both meaning "two or more capabilities of a vendor to manufacture or produce a customized good or service and excluding the vendor's name, contact information, payment preferences, type of business and goods sold." (Doc. 112 at 15).

The gravamen of defendants' argument is that, in order to differentiate this application from the prior art, the applicant for the patents-in-suit disclaimed information such as name, contact information, payment preferences, type of

business, and the goods sold from the definition of a “plurality of capabilities.” (Id. at 16). The court agrees. In his application, the inventor expressly disclaimed that this information qualified as “vendor capability data:”

In regard to the [prior art] seller database, the specification notes that the database maintains data on sellers with fields such as name, contact information, payment preferences, type of business, and the goods sold. . . . None of the referenced fields indicate that data regarding a plurality of capabilities for each vendor should be maintained for subsequent comparison. . . . *Nothing in the referenced portion of the cited document or any other portion could reasonably be considered to be data identifying a plurality of capabilities of each vendor.*

See Amendment F, Sep. 19, 2006, U.S. Patent Application No. 09/450,023 at 7 (filed Nov. 29, 1999). According to e-LYNXX, the applicant was arguing that, at most, only the “type of goods sold” identified in prior art databases would fall within the ambit of a capability, and so the prior art disclosed only a *single* vendor capability, not a *plurality* of vendor capabilities, thus distinguishing the instant application. (See Doc. 126 at 10). This argument is unpersuasive.

In context, it is clear that the applicant disclaimed vendor name, contact information, payment preferences, type of business, and the goods sold as encompassed within “vendor capability data.” In attempting to distinguish the instant invention from the prior art, the applicant stated unequivocally that the aforementioned attributes did *not* constitute capabilities. When an applicant disclaims specific claim term meanings in the course of prosecution, they may not be recaptured through claim construction in litigation. See Omega Eng’g, Inc. v. Raytek Corp., 334 F.3d 1314, 1323-24 (Fed. Cir. 2003). It is true that the Federal

Circuit has been reluctant to find disclaimer when the prosecution history is ambiguous. See, e.g., Northern Telecom Ltd. v. Samsung Elecs. Co., 215 F.3d 1281, 1293-95 (Fed. Cir. 2000) (declining to find disclaimer where statements were ambiguous and amenable to multiple reasonable interpretations). Here, the court finds that the applicant unambiguously disclaimed the vendor's name, contact information, payment preferences, type of business, and goods sold from within the meaning of "vendor capability data" when he stated that this information "could [not] reasonably be considered to be data identifying a plurality of capabilities of each vendor." See Amendment F, *supra*, at 7. Defendants' construction is therefore adopted.

v. *"information identifying a plurality of vendors" and "a pool of vendors associated with said buyer"*

Defendants assert that these claim terms are indefinite and that the specification lacks a written description to support the terms, and so they are therefore invalid and cannot be construed. (Doc. 112 at 17). This argument is the basis for defendants' motion for summary judgment. Consequently, the court will address defendants' summary judgment arguments before attempting to construe these claim terms.

vi. *"job data" and "job descriptor data"*

The claim terms "job data" and "job descriptor data" are closely related, and so the court will consider them in tandem. The parties disagree over the scope of information encompassed within "job data," with e-LYNXX asserting that the term

means “a set of information specified in a request for a job for which the buyer seeks a vendor,” (Doc. 113 at 14), and defendants asserting that it refers to “*all of the* information specified by the buyer in preparing its request for a job,” (Doc. 112 at 17) (emphasis added). e-LYNXX argues that some information may be input by the buyer – such as updating its profile – that is not within the meaning of job data. However, they cite nothing within the specification that supports this assertion.

The court adopts defendants’ proposed construction of “job data.” The asserted claims require that “job data pertaining to a job for which the buyer seeks a vendor” be input into the system. ‘143 patent, col. 20, ll. 4-6. Nothing in the patent limits the scope of “job data” to something less than all of the information for the particular job requested. This information includes the detailed specification for the job at hand, but may also include “standard or optional selection criteria” beyond those details. ‘106 patent, col. 8, ll. 25-27. Both of these categories of information fall within the definition of “job data.”

The parties’ views on the meaning of “job descriptor data,” however, are not materially different from one another. e-LYNXX asserts that the term means “a set of information defining a plurality of characteristics of a customized good or service for which the buyer wishes a bid,” (Doc. 113 at 15), while defendants would define it as “data which specifies two or more characteristics for each customized good or service for which the buyer wishes a bid, and that is based upon the actual job specification and no other information,” (Doc. 19 at 112).

The term is explicitly defined in the claims themselves. Claim 13 of the ‘106 patent describes “a job descriptor data which specifies a plurality of characteristics of said customized good or service for which said buyer wishes a bid,” which is the definition put forth by e-LYNXX. Col. 21, ll. 27-29. Other types of information associated with the job but not strictly related to the characteristics of the job itself – such as the vendor’s geographic location or union status – fall under the larger umbrella of job data, but are not job *descriptor* data. Defendants attempt to define “job descriptor data” narrowly, limiting its construction to information that relates to an actual job. For that limitation they cite a disclaimer made by the applicant in the prosecution history. (See Doc. 112 at 20). The court finds that the difference between the two constructions is not material, as no party has asserted that the term *should* encompass anything beyond the characteristics of a particular job. The term is defined in the claims and the court finds it unnecessary to engage in any further construction. For purposes of record clarity, and preservation of issues for appeal, the court will adopt e-LYNXX’s proposed meaning.

vii. “automatically comparing via a computer processor”

The parties dispute two aspects of the meaning of the term “automatically comparing via a computer processor,” contained in claim 13 of the ‘106 patent. See col. 21, ll. 36-37. e-LYNXX submits that this term requires no construction, and alternatively means “examining two sets of data to discover one or more similarities, which once initiated, is performed by a computer processor, without the need for manually performing the function.” (See Doc. 113 at 17). Defendants

argue that the term requires “comparing *each* of the capabilities identified in the vendor record to *each* of the characteristics identified in the job data *without human intervention or input*.” (See Doc. 112 at 20) (emphasis added). Hence, the threshold dispute is the meaning of the term “automatically,” and the second is the nature of the comparison. Because the term “automatically” may be construed with relative ease, the court addresses that term first.

e-LYNXX argues that “automatic” does not exclude the system from being initiated or interrupted by human intervention. The court agrees. The preferred embodiment in the specification states that, after the buyer enters job data into a form, the buyer “clicks on a ‘submit invitation-for-bid’ button . . . , and, in response, the system commences the processing for the comparison.” ‘106 patent, col. 13, ll. 19-37. The process, while “automatic” in the sense that a computer performs the actual comparison, must still be initiated by human action. This interpretation is wholly consistent with Federal Circuit precedent, which has recognized that a process may be construed as “automatic” even though it may be initiated or halted by human intervention. See CollegeNet, Inc. v. ApplyYourself, Inc., 418 F.3d 1225, 1235 (Fed. Cir. 2005).

The disagreement over the meaning of “comparison” is more intricate, and illustrates the parties’ fundamental conflict over the meaning of e-LYNXX’s patents. According to defendants, the patented system requires a comparison of *each capability* disclosed by a vendor in their vendor record with *each characteristic* defined by the buyer in the job data. (Doc. 112 at 20-21). For support, they direct

the court's attention to Figure 1A of the specification, which discloses that a buyer's invitation for bid is "compared to all VATTR [vendor attributes], according to SC criteria." '106 patent, fig. 1A (block 14). e-LYNXX disputes this perception, maintaining that the specification provides for a comparison based upon a "single specified search variable." (Doc. 113 at 19). As an example, e-LYNXX suggests that a buyer could run a comparison based on one of the variable search criteria, such as product category. Then, the system would return one or more vendor records whose product category matches the query. (*Id.*) For example, a buyer could run a search for the product category of "envelopes," and return only those vendors who have self-identified in their vendor records as having the capability of providing envelopes.

The court agrees with e-LYNXX. The claims and specification are devoid of any requirement that each attribute of the job data be compared to the vendor records of each vendor in the database. Claim 14, which is dependent upon and refers back to claim 13, discloses that "said comparison is performed *in accordance with selection criteria data.*" This disclosure is consistent with the larger "two pool" system, discussed in detail *infra*, by which buyers may establish one or more pre-qualified "vendor pools," to be stored in the database and accessed later for solicitation of bids. Search criteria are a means of narrowing the field of potential vendors to those most relevant to the instant job – envelope vendors for an envelope job. But the buyer need not limit strictly by product category, instead searching by geographic area or perhaps the characteristics of the vendor itself. It is the ability

to winnow down the aggregate database of vendors to only those most relevant to a particular buyer's needs for a particular job that supports the "two pool" system described by the claims, and that system is supported by the specification. The court therefore adopts e-LYNXX's proposed construction.

viii. "automatically identifying via a computer processor"

The parties' dispute on this term is limited to the meaning of "automatically." As noted *supra*, the court has adopted e-LYNXX's proposed meaning of the term "automatically" in the context of "automatically comparing via a computer processor." The court similarly adopts that definition here, and holds that this term means "establishing the identity of one or more qualified vendors, which once initiated, is performed by a computer processor, without the need for manually performing the function."

ix. "selected members from the identified subset of the buyer's associated pool of vendors"

e-LYNXX proposes that "selected members from the identified subset of the buyer's associate pool of vendors" requires no construction, or alternatively means "the vendors identified from the buyer's vendor pool through the comparison." Defendants assert that this term is invalid for indefiniteness and failure to provide a written description, and therefore cannot be construed, (Doc. 112 at 25). Defendants have moved for summary judgment partially on this basis. In the alternative, defendants argue that the term means "all of the vendors automatically identified as qualified for receiving the solicitation." (Doc. 112 at 25).

As in the case of the vendor pool terms, this claim term must be construed in the context of defendants' summary judgment arguments.

B. Summary Judgment

Defendants assert that summary judgment in their favor is warranted because each of e-LYNXX's asserted claims is invalid. They argue that the claims are invalid under 35 U.S.C. § 112, ¶ 2 for indefiniteness, under § 112, ¶ 6 for failing to disclose a corresponding structure to each means-plus-function element, and under § 112, ¶ 1 for failure to adequately describe the invention. (See generally Doc. 111). These arguments are addressed *seriatim*, and for the reasons set forth herein, are rejected.

1. Indefiniteness Under § 112, ¶ 2

A patent grants its holder a monopoly over the protected invention and the right to exclude all others from the subject matter covered by the patent claims. See Halliburton Energy Services, Inc. v. M-I LLC, 514 F.3d 1244, 1249 (Fed. Cir. 2008). In order for a patent to be valid, the specification must, *inter alia*, "conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." 35 U.S.C. § 112, ¶ 2. A validly issued patent is entitled to a statutory presumption of validity. See 35 U.S.C. § 282. One seeking to invalidate a claim must produce clear and convincing evidence of invalidity. Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1347-48 (Fed. Cir. 2005) (citing Budde v. Harley-Davidson, Inc., 250 F.3d 1369, 1376 (Fed. Cir. 2001)).

A patent's claims strike out the "metes and bounds" of the rights conveyed to the patentee. The undisputed purpose of the claims is to define the invention "in such a way as to distinguish it from prior art," see ROBERT L. HARMON ET AL., PATENTS AND THE FEDERAL CIRCUIT § 5.5 (10th ed. 2011), and to give sufficient notice to the public and potential competitors what is patented, such that they may avoid infringement, Halliburton, 514 F.3d at 1249; see also Datamize, 417 F.3d at 1347 ("Because the claims perform the fundamental function of delineating the scope of the invention . . . the purpose of the definiteness requirement is to ensure that the claims delineate the scope of the invention using language that adequately notifies the public of the patentee's right to exclude.") (internal citations omitted); Athletic Alternatives, Inc. v. Prince Mfg., Inc., 73 F.3d 1573, 1582 (Fed. Cir. 1996) ("[T]he primary purpose of the requirement 'is to guard against unreasonable advantages to the patentee and disadvantages to others arising from uncertainty as to their [respective] rights.'" (quoting General Electric Co. v. Wabash Appliance Corp., 304 U.S. 364, 369 (1938))).

The validity analysis under § 112, ¶ 2 consists of two requirements: first, the claim must "set forth what 'the applicant regards as his invention,' and second, it must do so with sufficient particularity and distinctness, i.e., the claim must be sufficiently 'definite.'" Allen Eng'g Corp. v. Bartell Indus., Inc., 299 F.3d 1336, 1348-49 (Fed. Cir. 2002) (quoting Solomon v. Kimberly-Clark Corp., 216 F.3d 1372, 1377 (Fed. Cir. 2000) (internal quotation marks omitted)). Determining whether a claim is adequately "definite" is a question of law, Orthokinetics, Inc. v. Safety Travel

Chairs, Inc., 806 F.2d 1565, 1576 (Fed. Cir. 1986); see also Personalized Media Commc'ns, LLC v. Int'l Trade Comm'n, 161 F.3d 696, 705 (Fed. Cir. 1998) (“A determination of claim indefiniteness is a legal conclusion that is drawn from the court’s performance of its duty as the construer of patent claims.”), to be judged by the standard of whether “one skilled in the art would understand the bounds of the claim when read in light of the specification.” Id. Similarly, the “subject matter which the applicant regards as his invention” portion of the statutory requirement is also a question of law, judged by the standard of one skilled in the art. Solomon, 216 F.3d at 1377, 1380.

Under either of the inquiries called for by § 112, ¶ 2, a court should review only a “limited range of evidence.” Solomon, 216 F.3d at 1378-80 (explaining that a more circumscribed evidentiary review is appropriate because “the language of issued claims is generally fixed . . . , the claims are no longer construed as broadly as is reasonably possible, and what the patentee subjectively intended his claims to mean is largely irrelevant to the claim’s objective meaning and scope”). This “limited range” may include the language of the claim, of the specification, and the history of the patent prosecution. See Power-One, Inc. v. Artesyn Tech., Inc., 599 F.3d 1343, 1350 (Fed. Cir. 2010). Because the patent is a legal writing, a reviewing court may be aided by the “familiar canons of claim construction.” Oakley, Inc. v. Sunglass Hut Int’l, 316 F.3d 1331, 1340-41 (Fed. Cir. 2003) (quoting All Dental Prodx, LLC v. Advantage Dental Prods., 309 F.3d 774, 779-80 (Fed. Cir. 2002)).

A claim must be particular and distinct, but it need not be drafted with “absolute clarity.” Datamize, 417 F.3d at 1347. For a claim to be invalid due to indefiniteness it must be “insolubly ambiguous” and “not amenable to construction.” Novo Indus., L.P. v. Micro Molds Corp., 350 F.3d 1348, 1358 (Fed. Cir. 2003). Whether such insoluble ambiguity exists turns on “whether [the] terms can be given any reasonable meaning.” Datamize, 417 F.3d at 1347; see also Exxon Research and Eng’g Co. v. United States, 265 F.3d 1371, 1375 (Fed. Cir. 2001) (stating that a claim is sufficiently definite “[i]f one skilled in the art would understand the bounds of the claim when read in light of the specification”). “If the meaning of the claim is discernible, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree . . . [the claim may be] sufficiently clear to avoid invalidity on indefiniteness grounds.” Id.

The Federal Circuit has held claims invalid under the “which the applicant regards as his invention” clause of § 112, ¶ 2, when the invention described by the claims is clearly different from that described in the specification, thus establishing that what was claimed was not “what the applicant regarded” as his invention. See Allen Eng’g Corp. v. Bartell Indus., Inc., 299 F.3d 1336, 1348-49 (Fed. Cir. 2002). Allen Engineering, an infringement case involving the gearboxes for riding concrete finishing machines, featured a rank incompatibility between the specification and the claim: the claim limited the steering box to pivoting “its gear box *only* in a plane perpendicular to said biaxial plane,” while the specification stated that the “gearbox . . . *cannot* pivot in a plane perpendicular to the biaxial plane.” Id. at 1349

(emphasis added). In light of this “obvious” inconsistency, the court held the claim to be invalid under § 112, ¶ 2. Id.

In the instant matter, defendants argue that all of e-LYNXX’s asserted claims are invalid under § 112, ¶ 2. Defendants contend that the claims are “irreconcilably inconsistent” with the written description, because the term “vendor pool” is defined differently in the specification and in the context of the claims. (Doc. 111 at 12). They maintain that the definition of “vendor pool,” as set forth in the specification, “requires that the vendor pool be created by a comparison of the vendor attributes (VATTR) to the job attributes (BATTR).” (Id.) By contrast, they argue, the definition of vendor pool as set forth in the claims requires “that a buyer establish a vendor pool *before* there is any comparison made between the vendor attributes (VATTR) and the attributes (BATTR) derived from the invitation-for-bid data.” (Id.)

Defendants argue that this disjuncture between the claims and the specification is primarily one of timing. The specification teaches that a selection of potential vendors is drawn from the database based on a comparison of the buyer’s specific needs and the vendor’s capabilities. The group of vendors produced by this comparison is the “vendor pool,” to whom invitations-to-bid are sent. But the process as described in the claim requires that a vendor pool exist *prior* to a comparison between a buyer’s needs and a vendor’s capabilities. Once a vendor pool is formed, there is then a comparison between vendor records and job data from which a further subset of qualified vendors is compiled, and who are invited to

bid. In essence, they argue that the specification describes only one pool, while the claims describe two, thus creating an inconsistency that invalidates the asserted claims under § 112, ¶ 2.

e-LYNXX counters that defendants’ description of the specification fails to account for the organization of vendors *within* the database. e-LYNXX argues that vendors enter their attributes into the database, which stores this information in the form of “vendor records.” (Doc. 128 at 3). The attributes that the vendors enter include their name, geographic location, and their manufacturing, production, and/or provider capabilities, among other things. See ‘106 patent col. 7, l. 67 – col. 8, l. 5. Buyers may then “pre-approve or pre-qualify” vendors, prior to the input of job data, in order to create a group of vendors associated with them – the “vendor pool.” (Doc. 128 at 3); (id. at 5) (“[T]he database is created by establishing vendor records containing the attributes of various vendors and organized to associate certain of the vendors with a particular buyer according to the buyer’s preferences. In fact, the specification discloses that a buyer may create a single vendor pool or multiple vendor pools.”). When a buyer submits the specifications for a job, the system compares those specifications with the attributes contained within the buyer’s pre-qualified vendor pools, generating a subset of vendors who will then receive invitations to bid. (Id. at 6). This is the “vendor selection pool.”

The court agrees with e-LYNXX’s interpretation of the patent. The specification clearly discloses the maintenance of several vendor pools associated with a buyer *prior* to the input of any specific job data:

A further embodiment of the invention includes means and method steps for *maintaining multiple vendor pools* for each of a plurality of buyers, the multiple vendor pools for a particular buyer *corresponding to multiple product or service types that the buyer procures*.

See ‘106 patent col. 5, ll. 47-51 (emphasis added). This corresponds with e-LYNXX’s assertion that the specification allows buyers to pre-qualify vendors *before* the system runs a job data comparison to select those who are qualified, and ultimately to solicit bids from them. Later, the specification describes the process of retrieving from the database the various vendor pools associated with a buyer for any particular job, and comparing the attributes of the vendors with the buyer’s job requirements. See id. col. 8, ll. 41-46 (describing “the step of retrieving all of the vendor attribute sets VATTR from the database . . . and comparing each to the job attributes . . . derived from the invitation-for-bid . . . *based on the standard selection criteria SC (such as product category and quality level)*” . . .) (emphasis added). Search criteria also may include vendor attributes such as whether the vendor uses union labor, is a small or disadvantaged business, or is minority- or women-owned. Id. col. 8, ll. 49-54. These search criteria appear to refer to the various vendor pools that a buyer may pre-qualify and that the database maintains, in order to allow the buyer to easily select which group of vendors to solicit for bids in any given job. For example, a buyer in the mid-Atlantic area may “pre-qualify” vendors within 100 miles of their location, narrowing the field of potential vendors to create a vendor pool that contains only vendors that are within a cost-effective radius. Similarly, a buyer with locations nationwide may

maintain multiple vendor pools, each within a set radius of their various locations. See id. col. 5, ll. 47-51 (“[T]he invention includes means and method steps for maintaining *multiple vendor pools* . . . corresponding to *multiple product or service types*”) (emphasis added).

The specification is therefore consistent with the claims. Claim 13 of the ‘106 patent clearly delineates the “two pools” system for bid solicitation. See id. col. 21, ll. 12-22 (“a means for . . . identifying a plurality of vendors for inclusion in a *pool of vendors associated with said buyer* to potentially receive a job solicitation) (emphasis added); id. col. 21, ll. 23-29 (“a means for . . . defining a job data from or on behalf of at least one buyer, *after said buyer’s vendor pool is determined*”) (emphasis added); id. col. 21, ll. 30-35 (“a means for . . . comparing . . . characteristics for said customized good or service with corresponding plural capabilities for vendors *from the pool of vendors associated with said buyer*”) (emphasis added); id. col. 21, ll. 36-40 (“a means for automatically identifying . . . at least one subset from the *buyer’s associated pool of vendors* as qualified for receiving the solicitation”) (emphasis added).

In addition to its independent evaluation of the patent, the court notes that this interpretation is consistent with the findings of the patent examiner of the ‘106 patent.⁵ In a non-final rejection issued January 10, 2008, the patent examiner rejected the ‘106 patent application on the same grounds upon which defendants assert invalidity: that there was no support in the specification for the creation of a vendor pool prior to the analysis of job data. See Office Action, Jan. 10, 2008, U.S. Patent Application No. 09/450,023 (filed Nov. 29, 1999). In response, the applicant cited a number of locations in the patent that in fact support the two-pool structure. See Reply to Office Action of Jan. 10, 2008, March 11, 2008, at 18-21, U.S. Patent Application No. 09/450,023 (filed Nov. 29, 1999). For example, the response cited the “Field of the Invention” portion of the application, stating that the invention “generally relates . . . [to] creating a database representing pools of vendors . . . for one or more subscribing buyers and . . . creating and maintaining a database representing a vendor base or pool for each subscribing buyer.” Id. at 18; see also ‘106 patent, col. 1, ll. 10-17 (same).

Upon consideration of the applicant’s response, the patent examiner deemed the arguments persuasive and withdrew the rejection, see Notice of Allowance and Fee(s) Due, July 7, 2008, U.S. Patent Application No. 09/450,023

⁵ The patent prosecution history is appropriate intrinsic evidence informing the court’s analysis. See Power-One, Inc. v. Artesyn Tech., Inc., 599 F.3d 1343, 1350 (Fed. Cir. 2010) (recognizing that the definiteness requirement must be discernible to a skilled artisan based on “the language of the claim, the specification, and the prosecution history”).

(filed Nov. 29, 1999), and thereafter the PTO approved the ‘106 patent application. While the court notes that it “is not bound by the PTO’s actions and must make its own independent determination of patent validity,” Medrad, Inc. v. MRI Devices Corp., 401 F.3d 1313, 1322 (Fed. Cir. 2005), the fact that the PTO was faced with and rejected the identical arguments put forth by defendants is further support for the court’s conclusion that defendants have failed to overcome the statutory presumption of validity by clear and convincing evidence.

As previously discussed, the construction of three claim terms is inextricably tied to the outcome of defendants’ summary judgment argument on indefiniteness. Having considered defendants’ arguments, the court will adopt e-LYNXX’s proposed construction of “a pool of vendors associated with said buyer” to mean “two or more vendors associated with a buyer that can potentially receive a job solicitation from that buyer,” e-LYNXX’s proposed construction of “information identifying a plurality of vendors” to refer to “obtained knowledge establishing the identity of two or more vendors to potentially receive a job solicitation from that buyer,” and e-LYNXX’s proposed construction of “selected members for the identified subset of the buyer’s associated pool of vendors” to mean “the vendors identified from the buyer’s vendor pool through the comparison.”

2. Means-Plus-Function Limitations

Defendants have identified five elements of claim 13 – which the court will refer to as elements B, C, D, E, and F – that they assert are invalid for indefiniteness. The court will first engage in a validity analysis of these five disputed terms, and will then construe the remaining means-plus-function terms over which there is a dispute as to construction, but not as to indefiniteness.

A. Indefiniteness of Means-Plus-Function Elements of Claim 13

Pursuant to 35 U.S.C. § 112, ¶ 6, inventors may express claim elements as a means for performing a particular function, without the claim describing the structure or material that performs the function. 35 U.S.C. § 112, ¶ 6;⁶ see also SCHWARTZ & GOLDMAN, *supra*, at § 5.IV.C. In patent law parlance, this is drafting in “means-plus-function” form, and the parties do not dispute that claim 13 and each of its constituent elements is drafted in this way. (See Joint Disputed Claim Terms Chart, Doc. 102-1, at 58-75). Means-plus-function drafting allows the patent applicant to cast the claim language in broad terms. However, in order to give the public and competitors sufficient notice as to what invention is actually claimed by the patent, the “applicant must describe in the patent specification some structure which performs the specified function.” Biomedino, LLC v. Waters Techs. Corp.,

⁶ “An element in a claim for a combination may be expressed as a means for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” Id.

490 F.3d 946, 948 (Fed. Cir. 2007). Put another way, “in return for generic claiming ability, the applicant must indicate in the specification what structure constitutes the means.” Id. Failure to adequately disclose the structure that performs the function is grounds for invalidity under § 112, ¶ 2 because “the applicant has in effect failed to particularly point out and distinctly claim the invention.” In re Donaldson Co., 16 F.3d 1189, 1195 (Fed. Cir. 1994) (en banc).

Construing means-plus-function claims is a two-step process. First, the court must determine the function of the limitation. Medtronic, Inc. v. Advanced Cardiovascular Sys. Inc., 248 F.3d 1303, 1311 (Fed. Cir. 2001). After identifying the function, the next step is to determine what structure, disclosed in the specification, corresponds to the function. Id.; see also Micro Chem., Inc. v. Great Plains Chem. Co., 194 F.3d 1250, 1258 (Fed. Cir. 1999) (“§ 112, ¶ 6 requires both identification of the claimed function and identification of the structure in the written description necessary to perform that function.”). The disclosed structure “corresponds” only if there is a clear link between the functions claimed, and the specification or prosecution history. B. Braun Med., Inc. v. Abbott Labs., 124 F.3d 1419, 1424 (Fed. Cir. 1997). A means-plus-function clause will be indefinite under § 112, ¶ 2 if “a person of ordinary skill in the art would be unable to recognize the structure in the specification and associate it with the corresponding function in the claim.” AllVoice Computing PLC v. Nuance Commc’ns, Inc., 504 F.3d 1236, 1241 (Fed. Cir. 2007).

When faced with a claim consisting of multiple elements – as is the case with claim 13 – it is appropriate for the court to address separately each element in the claim, determine what function it describes, and then determine whether the specification sufficiently discloses a corresponding structure. See Seal-Flex, Inc. v. Athletic Track and Court Const., 172 F.3d 836, 843 (Fed. Cir. 1999) (“Section 112, ¶ 6 . . . obligates this court to interpret *each functional element* in a combination claim by reference to the corresponding structure, material, or acts described in the specification and their equivalents.”) (emphasis added); Al-Site Corp. v. VSI Intern’l, Inc., 174 F.3d 1308, 1318-19 (Fed. Cir. 1999) (separately analyzing elements to determine whether they are drafted in means-plus-function form). Therefore, each of the constituent elements of claim 13 that defendant challenges is entitled to a separate analysis regarding its function, corresponding structure, and ultimate validity.

Although clearly still “evolving,” the Federal Circuit has invoked a logical analysis of computer-implemented means-plus-function claims. When a claim requires a “special purpose” computer in order to perform the means-plus-function limitation, the Federal Circuit has stated that the structure disclosed in the specification must “be more than simply a general purpose computer or microprocessor.” Noah Sys., Inc. v. Intuit, Inc., 675 F.3d 1302, 1312 (Fed. Cir. 2012) (quoting Aristocrat Techs. Austl. Pty Ltd. v. Int’l Game Tech., 521 F.3d 1328, 1333 (Fed. Cir. 2008)). Specifically, the required structure is the algorithm by which the computer is to perform the claimed function. Id.; see also Net MoneyIN, Inc. v.

VeriSign, Inc., 545 F.3d 1359, 1367 (Fed. Cir. 2008); Aristocrat, 521 F.3d at 1333 (“Thus, in a means-plus-function claim ‘in which the disclosed structure is a computer, or microprocessor, programmed to carry out an algorithm, the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm.’” (quoting WMS Gaming, Inc. v. Int’l Game Tech., 184 F.3d 1339, 1349 (Fed. Cir. 1999))); Harris Corp. v. Ericsson Inc., 417 F.3d 1241, 1254 (Fed. Cir. 2005).

The meaning of algorithm in the context of computer-implemented means-plus-function limitations is broad, “encompass[ing] ‘in essence a series of instructions for the computer to follow.’” Typhoon Touch Tech., Inc. v. Dell, Inc., 659 F.3d 1376, 1384 (Fed. Cir. 2011) (quoting In re Waldbaum, 457 F.2d 997, 998 (Ct. Cust. App. 1972)). What is required is “a fixed step-by-step procedure for accomplishing a given result.” Id. at 1384-85 (quoting C. SIPPL & C. SIPPL, COMPUTER DICTIONARY AND HANDBOOK (1972)) (internal quotation marks omitted). The algorithm may be disclosed in the form of a mathematical formula, a flow chart, prose, or in any other sufficiently descriptive manner, but simply disclosing software without detailing the method by which the software functions fails to satisfy the structure requirement. Noah Systems, 675 F.3d at 1312 (quoting Finisar Corp. v. DirecTV Grp., Inc., 523 F.3d 1323, 1340 (Fed. Cir. 2008)).

In Typhoon Touch, the Federal Circuit reversed a district court’s ruling of indefiniteness of the computer-implemented means-plus-function claim a “means for cross-referencing.” 659 F.3d at 1384-87. Recognizing that satisfying the

disclosure requirement of § 112, ¶ 2 does not require that computer code be included in the specification, the court found that a detailed description of the four-step process for cross-referencing was sufficient. Id. at 1385. The cross-referencing process began with data entry and storage of that data in memory. Id. at 1386. The system would then perform a search of a library of responses to determine whether a match existed. Thereafter, the system reported the existence of a match to the user. Id. This step-by-step process was sufficient to satisfy the algorithm requirement.

The Federal Circuit has recognized a narrow exception to the algorithm requirement for computer-implemented means-plus-function limitations when the claimed function can be accomplished by any general purpose computer and does not require special programming. Noah Systems, 675 F.3d at 1332 n.2. In In re Katz Interactive Call Processing Patent Litig., 639 F.3d 1303, 1315 (Fed. Cir. 2011), the court determined that the claimed functions of “processing,” “receiving,” and “storing” data were functions that could be performed by any general purpose computer. The court rejected the appellee’s broad reading of WMS Gaming, Harris and Aristocrat to require the disclosure of an algorithm for any function performed by a general purpose computer. The court distinguished those cases on the grounds that they dealt with specialized programming necessary to convert a general purpose computer into one capable of performing the claimed function. Id. at 1315-17. By contrast, the functions at issue in Katz could be performed by any computer, and therefore it was not required that the patent disclose more

structure than the general purpose processor. Id. at 1315. Recently, in Ergo Licensing, LLC v. Carefusion 303, Inc., the Federal Circuit elaborated that “[i]t is only in the rare circumstances where any general-purpose computer without special programming can perform the function that an algorithm need not be disclosed.” 673 F.3d 1361, 1366 (Fed. Cir. 2012).

Defendants argue that elements B, C, D, E, and F of claim 13 describe functions that have no corresponding structure in the specification, and are therefore invalid as indefinite. (Doc. 111, at 16). Defendants’ precise arguments regarding each element will be discussed *infra*, but it is a fair summary to say that their means-plus-function arguments are, in essence, a continuation of their argument that the definition of “vendor pool” as used in the claims is inconsistent with the definition as set forth in the specification. In other words, because the specification does not even contemplate the two-pool system described in the claims, then *a fortiori* the specification fails to adequately disclose a corresponding structure to achieve that function.

i. *Element B*

Element B of claim 13 states as follows:

a means for receiving an electronic communication from any buyer using the system providing information identifying a plurality of vendors for inclusion in a pool of vendors associated with said buyer to potentially receive a job solicitation, wherein the system stores electronic data sufficient to identify every vendor pool and its association with a corresponding buyer based upon the buyer transmitted vendor pool identification information which occurs prior to analysis of job data pertaining to a job for which bids are sought by or on behalf of the buyer

‘106 patent, col. 21, ll. 11-22.

Defendants argue that element B is indefinite because the specification does not disclose a corresponding structure for the function of storing vendor pool data prior to the analysis of job data. (Doc. 111, at 17). Rather, defendants argue, the specification only discloses a vendor pool after comparison of a vendor base with job data. (*Id.*) Moreover, defendants argue that the specification does not disclose a corresponding algorithm for the elements of claim 13, and so the claim fails as a matter of law. (Doc. 150, at 8). e-LYNXX submits that this argument is merely a rehashing of the same “straw-man” argument put forth by defendants previously, and that the specification, in multiple places, discloses the organization within the database of multiple vendor pools. (Doc. 128, at 8-9).

Defendants’ argument that e-LYNXX cannot rely on a “conventional general purpose computer” to support some elements of claim 13 misstates the law. (*See* Doc. 150, at 8) (arguing that all “computer-implemented means-plus-function limitations” require disclosure of an algorithm). The Federal Circuit stated in *Katz*,

and affirmed recently in Noah Systems and Ergo Licensing, that an algorithm is required only for those means-plus-function limitations that require use of a special purpose computer. See Katz, 639 F.3d at 1316-17 (holding that the claims “means for processing,” “receiving,” and “storing” may be performed by a general purpose computer, and therefore do not require disclosure of an algorithm); Noah Systems, 675 F.3d at 1312 n.8 (recognizing the distinction drawn in Katz between those functions requiring special purpose computers and those that can be performed on any general purpose computer); Ergo Licensing, 673 F.3d at 1364-65 (“[Katz] . . . identified a narrow exception to the requirement that an algorithm must be disclosed for a general-purpose computer: when the function ‘can be achieved by any general purpose computer without special programming.’” (quoting Katz, 639 F.3d at 1316)). Defendants’ interpretation of the algorithm requirement is therefore too broad, neglecting the narrow but important exception recognized in Katz. To the extent that any of the means-plus-function elements describe functions that can be performed by a general purpose computer, there is no requirement that the specification disclose an algorithm as the corresponding structure.

The parties have agreed that the function of element B is:

receiving an electronic communication from any buyer using the system providing information identifying a plurality of vendors for inclusion in a pool of vendors associated with said buyer to potentially receive a job solicitation, wherein the system stores electronic data sufficient to identify every vendor pool and its association with a corresponding buyer based upon the buyer transmitted vendor pool identification information which occurs prior to analysis of job data pertaining to a job for which bids are sought by or on behalf of the buyer.

(See Joint Disputed Claim Terms Chart, Doc. 102-1, at 58-59). Element B recites “a means for *receiving* an electronic communication.” ‘106 patent, col. 21, l. 11 (emphasis added). As the Federal Circuit held in Katz, “[a]bsent a possible narrower construction of the term[] . . . ‘receiving,’” this is a function that can be performed by any general purpose computer without specialized programming. 639 F.3d at 1316. Therefore, there is no need for the ‘106 patent to disclose a particular algorithm for the function of “receiving” information. The patent specification describes the receipt of information through a website, accessed by a standard web browser. ‘106 patent, col. 11, ll. 35-44. The buyer accesses the website through the use of a unique username and password, ensuring the proper association between data and the user who enters it. Id.

While the function of receiving electronic communications from buyers requires no specialized programming, the element B functions related to the organization and association of vendors with buyers do require the disclosure of an algorithm, because vendor data could be organized according to myriad criteria. See Katz, 639 F.3d at 1315 (noting that, because telephone calls may be “conditionally coupled” in many ways, the patent must disclose with particularity the algorithm by which the system at issue worked). The ‘106 patent’s specification discloses the necessary structure to support the claims, and is therefore not invalid for indefiniteness. The summary portion of the patent describes “means and method steps for maintaining multiple vendor pools for each of a plurality of

buyers, the multiple vendor pools for a particular buyer corresponding to multiple product or service types that the buyer procures.” ‘106 patent, col. 5, ll. 46-51. Later, the specification describes how buyers can create and manage a pool of vendors by the assignment of selection criteria, which as noted *supra* can include such things as geographic location and union status. *Id.*, col. 16, ll. 41-46 (“[T]he buyer can create and manage a single pool of vendors who are given specific production category and quality level ratings that, *together with other selection criteria*, automatically designate which solicitations each vendor in a pool can receive”) (emphasis added); *see also id.*, col. 17, ll. 22-25 (“quality control begins at the pre-qualification stage when vendor pools are established”). Element B’s function therefore corresponds with the structure disclosed in the specification, and is not invalid.

ii. Element C

Element C of claim 13 states as follows:

a means for receiving an electronic communication defining a job data from or on behalf of at least one buyer, after said buyer’s vendor pool is determined, said job data including a job descriptor data which specifies a plurality of characteristics of said customized good or service for which said buyer wishes a bid

Id., col. 21, ll. 23-29.

Defendants argue that element C is invalid on functionally identical grounds as element B: that the specification only discloses the creation of a vendor pool after the submission of job data, not before; as a result, there is no disclosed structure and the claim is indefinite. (Doc. 111, at 17).

The court finds that the function of element C is to “[receive] an electronic communication defining a job data from or on behalf of at least one buyer, after said buyer’s vendor pool is determined,” with the job data “including a job descriptor data which specifies a plurality of characteristics.” As established *supra*, the patent satisfies the structural disclosure requirements necessary to link the two-pool system in the claims with the specification. Consequently, the question remains whether the specification sufficiently discloses a structure for the receipt of job data as claimed in element C.

As in element B, “receiving” an electronic communication is a function that may be performed by any general purpose computer, and therefore no specific algorithm is required. See Katz, 639 F.3d at 1316. With that in mind, it is clear that the specification sufficiently discloses the process by which the system receives job data from buyers. The specification provides a flow chart detailing this process. The buyer, through an internet web browser connected to the internet via telephone, ISDN, cable modem, or any other connection, transmits job data through the internet to the system’s web server/database, which is also connected to the internet. Id. fig. 2A; see also id. col. 6, l. 59 – col. 7, l. 60. Further support may be found in the screen shots of the buyer-side job data entry process, input through a standard internet browser. ‘106 patent, figs. 3-15. Because the transmittal of data between computers through the internet is a function capable of being performed by a general purpose computer without specialized programming, this disclosure is sufficient. Defendants’ argument that element C is indefinite is unavailing.

iii. Elements D and E

Elements D and E of claim 13 deal with the comparison of vendors in the vendor pool with the buyer's job attributes, and the creation of the vendor selection pool based on that comparison, respectively. Element D states as follows:

a means for automatically comparing via a computer processor said vendor records to said job data, wherein said comparing includes comparing said plurality of characteristics for said customized good or service with corresponding plural capabilities for vendors from the pool of vendors associated with said buyer

'106 patent, col. 21, ll. 30-35. Element E, which functions in concert with element D, states:

a means for automatically identifying via a computer processor at least one subset from the buyer's associated pool of vendors as qualified for receiving the solicitation, based on said comparison

Id. col. 21, ll. 36-40. Once again, defendants' argument on this point is merely a repetition of their previous argument regarding a perceived disparity between the definition of vendor pool as used in the claims and in the specification. (See Doc. 111 at 18). This argument is rejected.

Elements D and E both require special-purpose computers to accomplish their respective functions, and so these elements must be supported in the specification by an algorithm. Element D describes the function of "automatically comparing," through use of a computer processor, the attributes of the vendors in the buyer's vendor pool with the requirements contained in the buyer's submitted job data. Element E describes the function of "automatically identifying" a further subset of vendors, identified through the comparison in element D, in order to

constitute the vendor selection pool that will receive bid solicitations. Both elements correspond with algorithms disclosed in the specification, and so are valid.

The vendor pool comparison is supported by multiple figures and passages in the specification. Fig. 15, box 14 illustrates the comparison: a vendor pool is drawn from the database “according to SC criteria” – the buyer’s pre-qualification search criteria, such as geographic location or union status. See ‘106 patent, fig. 15. Then, the attributes of the vendors in the vendor pool are compared to the specific job criteria identified in the buyer’s invitation-for-bid. See ‘106 patent, abstract ll. 8-12 (“The invitation-for-bid is compared to each of the vendor’s attributes according to certain standard or optional selection criteria to generate a vendor selection pool of vendors qualified to bid on the job.”); id. col. 5, ll. 4-11 (describing a comparison of “the set of quantified buyer’s attributes to each quantified set of vendor’s attributes . . . *the comparison being in accordance with a buyer defined selection criteria*”) (emphasis added). That comparison generates the vendor selection pool claimed by element D. See id. col. 5, ll. 9-11 (“generating, as a result of the comparison, a data set representing a vendor selection pool for the particular buyer”). The process by which a comparison is made and the vendor selection selected is disclosed in the specification. Hence, elements D and E are valid.

iv. Element F

Element F of claim 13 states as follows:

a means for transmitting the solicitation to only selected members from the identified subset of the buyer's associated pool of vendors

'106 patent, col. 21, ll. 23-29.

The function of element F is simply to transmit bid solicitations to vendors identified as qualified to receive bid solicitations through the comparison and identification carried out in elements D and E. In light of the fact that the specification properly discloses the structure necessary to support the distinction in the claims between the vendor pool and the vendor selection pool, it is clear that the specification also discloses a sufficient structure for transmitting bid solicitations to members of the vendor selection pool. See id. col. 13, ll. 38-45 ("After the print vendor selection pool VPOOL is created by the system, the vendors' invitation-for-bid VIFB is submitted to each vendor therein."). Defendants' argument that element F is invalid is therefore rejected.

B. Construction of Remaining Means-Plus-Function Limitations

Having determined that elements B, C, D, E, and F of claim 13 are not invalid for indefiniteness, the court will now construe the functions and corresponding structures of elements A, G, and H of claim 13 of the '106 patent.

i. Element A

Element A of claim 13 provides for a "means for receiving electronic communications from a plurality of vendors prior to receiving job data from a

buyer.” ‘106 patent, col. 21, ll. 1-3. The parties agree that the function that this limitation describes is to receive electronic communications from a plurality of vendors prior to receiving job data, and to use those electronic communications to establish a plurality of vendor records which are stored in electronic memory. (See Joint Disputed Claim Terms Chart, Doc. 102-1 at 54-55). Although they agree on the function, the parties dispute precisely what structure or structures in the specification correspond to this function.

The parties agree that element A is supported in the specification by “an internet server running under Windows NT 4.0, with MS Internet Information Server 4.0, Oracle Database 7.3.4.0, and an information server using standard ‘.dll’ files created in any of the standard programming languages known in the art, . . . all running on a conventional general purpose computer hardware.” ‘106 patent, col. 8, ll. 2-8. Defendants assert that this is the *only* supporting structure disclosed in the specification, and therefore element A must be limited to this embodiment (see Doc. 112 at 31-32), whereas e-LYNXX asserts that additional portions of the specification correspond with this limitation. In particular, e-LYNXX argues that data can be transferred to the system database through means other than a web portal, such as through e-mail, fax, voice, or other “external data link[s].” (See Doc. 113 at 27).

The court will adopt e-LYNXX’s proposed construction. The specification contemplates communication between vendors and the database by means other than website data entry, and by third-parties operating on behalf of the vendors.

See ‘106 patent, col. 11, ll. 31-34 (“Alternatively, the print vendors 8 can transmit their respective vendor attributes VATTR to the print buyer 6 by e-mail or equivalent means for entry by the print buyers 6 or any authorized third party.”); id. col. 15, ll. 21-26 (“The external data link 506 may be a connection via the Internet, through e-mail or some other alternate sources for data transfer.”). While data entry through a website is certainly *one* structure that supports element A, it is not the *only* structure that does so. Defendants’ contentions to the contrary are therefore rejected.

ii. Element G

Element G recites “a means for receiving bid response data from at least one of said vendors which received said solicitation, said bid response data identifying each of the vendors from which it was received and a bid price.” ‘106 patent, col. 21, ll. 44-47. The parties agree that the claimed functions of this limitation are: (1) receiving electronic communications from at least one vendor who received a solicitation; and (2) the bid data identifying each of the responding vendors as well as the bid that they submitted. (See Joint Disputed Claim Terms Chart, Doc. 102-1 at 75-78).

The parties also agree that element G is supported in the specification by a structure including a website for receiving bid information from vendors, bids for solicited jobs, and responding bid information, all of which is stored in a file on the database. (See Doc. 112 at 34; Doc. 113 at 33); see also ‘106 patent, Fig. 1b; id. col. 8, l. 63 – col. 9, l. 7. The parties disagreement on this element, like element A, centers

on whether the specification supports structure *beyond* the aforementioned website. e-LYNXX asserts that bid data may be transmitted through a number of means alternative to website entry, and that defendants improperly seek to limit the claims to the preferred embodiment.

The court will construe element G in accordance with e-LYNXX's proposal. The specification supports a number of alternate methods by which bid data may be transmitted to the database. These alternate means include email, fax, optical character recognition, or voice-to-text recognition. *Id.* col. 15, ll. 24-32. Indeed, the specification explicitly states that "bid data may be received in a variety of different formats for the convenience of all system users. System users are *thus not limited* to access through a web interface." *Id.* col. 15, ll. 35-36. Based upon this clear language, the court finds that the specification does not limit element G's corresponding structure to website data entry.

iii. Element H

The parties' final disputed limitation is element H, which claims "a means for outputting to said buyer an electronic communication providing at least one of said bid response data." '106 patent, col. 21, ll. 48-49. The parties agree that the claimed function for this limitation is to output, to the buyer, an electronic communication providing at least one bid response. (See Joint Disputed Claim Terms Chart, Doc. 102-1 at 78-81). As was the case with elements A and G, defendants claim that the structure is limited strictly to a website or direct read of a database that is resident

on the computer system. (See Doc. 112 at 35). e-LYNXX argues that an additional structure supports this limitation.

The court agrees with e-LYNXX. The patent specification expressly discloses that “a generic external data link [may be used] instead of the vendor web browser 10, buyer web browser 12, web site 4 and database 2 depicted at FIG. 1B.” ‘106 patent, col. 14, ll. 4-9. The court will therefore adopt e-LYNXX’s proposed construction of element H’s corresponding structure.

3. Lack of Written Description Under § 112, ¶ 1

Defendants’ final argument for summary judgment is that the patent is invalid for failure to adequately describe the invention. Pursuant to 35 U.S.C. § 112, ¶ 1, a patent’s specification must “contain a written description of the invention.” Id. The purpose of the written description requirement is to ensure that, as of the filing date of the application, the inventor possessed the specific subject matter claimed. See HARMON ET AL., *supra*, § 5.4; see also LizardTech, Inc. v. Earth Resource Mapping, Inc., 424 F.3d 1336, 1344 (Fed. Cir. 2005) (the written description requirement, “an essential part of the quid pro quo of the patent bargain, ‘requires the patentee . . . to describe [the invention] in such terms that any person skilled in the art to which it appertains may construct and use it after the expiration of the patent.’” (quoting Permutit Co. v. Graver Corp., 284 U.S. 52, 60 (1931) (alterations in original)).

Defendants' argument is based entirely on their contention that the patent specification fails to disclose the two-step vendor pool process described in the claims. Having engaged in a thorough analysis of this question with regard to defendants' indefiniteness argument, the court finds it unnecessary to do so with regard to the written description requirement. The specification provides ample support for the two-step vendor pool process. See supra Part III.B.1. Defendants' argument that the patent is invalid for failure to comply with the written description requirement of § 112, ¶ 1, is without merit.

IV. Conclusion

For the aforementioned reasons, defendants' motion for summary judgment is denied. An appropriate order containing the court's claim constructions will follow.

S/ Christopher C. Conner
CHRISTOPHER C. CONNER
United States District Judge

Dated: September 27, 2012

**IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA**

e-LYNXX CORPORATION,	:	CIVIL ACTION NO. 1:10-CV-2535
	:	
Plaintiff,	:	
	:	(Judge Conner)
v.	:	
	:	
INNERWORKINGS, INC.,	:	
RENT-A-CENTER, INC.,	:	
DR. PEPPER SNAPPLE GROUP,	:	
INC., R.R. DONNELLEY & SONS	:	
CO., NEWLINENOOSH, INC.,	:	
THE STANDARD REGISTER CO.,	:	
AND CIRQIT.COM, INC.,	:	
	:	
Defendants	:	

ORDER

AND NOW, this 27th day of September, 2012, upon consideration of the motion for summary judgment (Doc. 109) of defendants Innerworkings, Inc., Taylor Corporation, Rent-a-Center, Inc., Dr. Pepper Snapple Group, Inc., Staples, Inc., R.R. Donnelley & Sons Company, NewlineNoosh, Inc., The Standard Register Company, and Cirqit.com, Inc. (collectively, “defendants”), and the parties’ briefs regarding the proper interpretation of claim terms, (Docs. 112, 113, 125, 126), and for the reasons set forth in the accompanying memorandum, it is hereby ORDERED that:

1. Defendants’ motion for summary judgment is DENIED.
2. The court will construe the disputed claim terms as follows:

- a. “*buyer*” – the ultimate purchaser of customized goods or services
- b. “*electronic communications*” – information transmitted or conveyed electronically
- c. “*vendor records*” – a set of attributes associated with a vendor
- d. “*vendor capability data*” – two or more capabilities of a vendor to manufacture or produce a customized good or service and excluding the vendor’s name, contact information, payment preferences, type of business and goods sold
- e. “*plurality of capabilities for said vendor to provide a customized good or service*” – two or more capabilities of a vendor to manufacture or produce a customized good or service and excluding the vendor’s name, contact information, payment preferences, type of business and goods sold
- f. “*information identifying a plurality of vendors*” – obtained knowledge establishing the identity of two or more vendors to potentially receive a job solicitation from that buyer
- g. “*a pool of vendors associated with said buyer*” – two or more vendors associated with a buyer that can potentially receive a job solicitation from that buyer
- h. “*job data*” – all of the information specified by the buyer in preparing its request for a job
- i. “*job descriptor data*” – a set of information defining a plurality of characteristics of a customized good or service for which the buyer wishes a bid
- j. “*automatically comparing via a computer processor*” – examining two sets of data to discover one or more similarities, which once initiated, is performed by a computer processor, without the need for manually performing the function
- k. “*automatically identifying via a computer processor*” – establishing the identity of one or more qualified vendors, which once initiated, is performed by a computer processor, without the need for manually performing the function

1. *“selected members from the identified subset of the buyer’s associated pool of vendors”* – the vendors identified from the buyer’s vendor pool through the comparison

S/ Christopher C. Conner
CHRISTOPHER C. CONNER
United States District Judge